Support for Amendment:

Method claim 9 is introduced by this amendment. The step of providing an overpressure environment around each spray nozzle in spray beam is supported by the specification at, for example, page 2, lines 1-5, and page 4, lines 1-16. The step of generating a spray cone from each spray nozzle that leaves the cover undisturbed is supported by the specification at, for example, page 1, lines 31-35.

No new matter is introduced by this amendment, and entry thereof is requested. Upon entry, claims 1-9 are active in this application.

Remarks

The applicant's below-named representative would like to thank Examiner Jill Culler for the helpful and courteous discussion in the issues in this application held on March 4, 2009. This discussion focused on the differences between the present invention and the prior art relied upon in the outstanding Office Action. The substance of this discussion is summarized and further expanded upon in the following remarks.

Claims 1-5 and 8 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,299,495 to Schoeps et al. and U.S. Patent No. 5,040,457 to Lin. This rejection is traversed.

The presently claimed invention is directed at a method and a device that provides an overpressure environment around spray nozzles on a spray beam in order to reduce clogging of the nozzles, and provides the overpressure environment without disturbing the spray pattern created by the nozzles. In order to achieve this, the applicant found that individual covers can be placed around each spray nozzle where each individual cover includes an air conduit for receiving air flow that creates the overpressure environment and includes an opening constructed to not disturb the spray from the nozzle.

Schoeps et al. are directed at a cylinder moistening assembly that includes a screen assembly between each moistening fluid spray nozzle and the cylinder to be moistened and disturbs the spray so that the cylinder receives a "a uniform spray of the moistening fluid." See Schoeps et al. at column 2, lines 51-68. Schoeps et al. state that a "primary advantage of the cylinder moistening assembly of the present invention is its ability to provide a virtually uniform moisture distribution factor per unit of surface area of the cylinder being moistened." See Schoeps et al. at column 3, lines 1-4. Schoeps et al. further characterize the presence of a "screen assembly with a controllable spray outline" to achieve the uniform moisture distribution. See Schoeps et al. at column 3, lines 1-14. In other words, Schoeps et al. provide an assembly that modifies the spray pattern from the nozzles in order to provide a uniform moisture distribution on the cylinder. The ability of the cylinder moistening assembly to provide a uniform moisture distribution on the cylinder is demonstrated by the moisture distribution diagram shown by Schoeps et al. in Figure 7.

The cylinder moistening assembly described by Schoeps et al. includes a plurality of fan spray nozzle devices 7 disposed axially next to each other, a cylinder 2, and a two-piece screen

assembly 15 with upper and lower plates 12 and 13 located between each of the nozzles 11 and the surface of the cylinder 2. See Schoeps et al. at column 4, lines 27-38, and Figure 1. Additionally, the spray 10 of moistening fluid extends in the direction of the cylinder 2 through the nozzle 11 of the fan spray nozzle 7, and the spray 10 "is smoothed by means of the placement of the screen plates 12, 13, which are moveable in the direction of the arrow X in accordance with the amount of water needed, and is evenly distributed in accordance with the alternative use of the outlines 23 to 27, so that the spray 10 leaves the screen plates 12 and 13 as a smoothed and evenly distributed spray 18 and strikes the cylinder 2." See Schoeps et al. at column 5, line 62 through column 6, line 4, and Figure 1.

There are at least a couple of differences between the presently claimed invention and Schoeps et al. A first difference is that the presently claimed invention provides a cover that surrounds each spray nozzle, individually, on a spray beam. In contrast, Schoeps et al. do not disclose providing a cover around each spray nozzle individually. In fact, it is clear from the description of Schoeps et al. that they intend their cover to surround a plurality of spray nozzles. The Examiner's attention is directed to Schoeps et al. at column 5, lines 38-59, and Figures 2-6 that shows exemplary two-piece screen assemblies 15 wherein the distance "A" is the distance between adjacent spray nozzles. Clearly, the teaching of Schoeps et al. are for a housing that encompasses a plurality of spray nozzles.

During the discussion between Examiner Jill Culler and the applicant's below-named representative, Examiner Culler pointed to Schoeps et al. at column 4, lines 19-22, for the statement:

> "A plurality of fan spray nozzle devices 7 are carried in a housing or housings 3 and are attached to suitable support members 4 and 6 which are part of the housing 3."

This is clearly not a teaching by Schoeps et al. to provide a housing around individual nozzles according to the presently claimed invention. The clear teaching of Schoeps et al. is to provide a smoothing affect on multiple spray nozzles, and the way to do that is to utilize a two-piece screen assembly 15 that extends along a plurality of spray nozzles to provide a smoothing effect from those nozzles. The fact that Schoeps et al. mentions the possibility of multiple housings can not be interpreted as a teaching to providing housings around individual spray nozzles. If one were

to provide housings around each spray nozzle on a spray beam, it is unclear how one would achieve a smoothing affect of the sprayed moistening agent on the cylinder.

A second difference between the presently claimed invention and Schoeps et al. is that the presently claimed invention provides a device that does not disturb the spray pattern from the nozzles. In contrast, Schoeps et al. identify as their "primary advantage" the disruption of the spray to create a "uniform moisture distribution on the cylinder." See Schoeps et al. at column 3, lines 1-14, and column 5, lines 38-69 in the context of Figure 7.

It is additionally noted that Schoeps et al. appear to be directed at an overpressure environment within the housing 3. The Examiner's attention is directed to Schoeps et al. at column 4, lines 54-61. It is submitted that the opening between the screen plates 12 and 13 helps control the overpressure environment within the housing 3. Accordingly, without the screen plates 12 and 13, it is not seen how an overpressure environment can be achieved according to the cylinder moistening assembly described by Schoeps et al.

The outstanding Office Action appears to rely upon Lin for the disclosure of an opening that does not disturb spray from a nozzle. See the outstanding Office Action at page 3 in reference to Lin at column 3, lines 4-19, and Figure 2. It is pointed out, however, that Lin is not concerned with providing an overpressure environment around the nozzles 4. Instead, Lin provide for reducing clogging at the spray nozzle by introducing pressurized air through the narrow orifice 20. See Lin at column 3, lines 31-42 and Figure 2. Accordingly, there is no need by Lin of a cover or screen to create an overpressure environment around the spray nozzle.

One having ordinary skill in the art would not have looked to Lin for teaching to modify Schoeps et al. In fact, modifying Schoeps et al. by removing the two-piece screen assembly 15 would go against the teachings of Schoeps et al. of the need for smoothing the spray pattern to provide a uniform moisture distribution on the cylinder. Furthermore, removing the two-piece screen assembly 15 from the device of Schoeps et al. would likely have the effect of removing or, at least, significantly reducing the overpressure environment around the nozzles. Clearly, such a modification of Schoeps et al. would destroy the teachings of Schoeps et al. of providing a uniform moisture distribution on the cylinder and of providing an overpressure environment around the nozzles.

In view of the above comments, one skilled in the art would not have looked to Lin to modify Schoeps et al. to achieve the presently claimed invention. Accordingly, withdrawal of the prior art-based rejection over Schoeps et al. and Lin is requested.

The outstanding Office Action includes a rejection of claims 6 and 7 under 35 U.S.C. §103(a) over Schoeps et al., Lin, and U.S. Patent No. 2,448,226 to Marsden. This rejection is traversed.

As discussed above, Schoeps et al. describe a cylinder moistening assembly and are primarily concerned with providing a uniform moisture distribution on the cylinder. In order to provide a uniform moisture distribution on the cylinder, Schoeps et al. require the presence of a two-piece screen assembly 15 that disrupts the spray pattern created by the plurality nozzles. In addition, Schoeps et al. teach the presence of a housing that surrounds multiple spray nozzles. Furthermore, the design of Schoeps et al. provides for an overpressure environment within the housing 3. As a result, it is not a simple matter to remove the two-piece screen assembly 15 taught by Schoeps et al. without also removing or significantly reducing the overpressure environment around the spray nozzles to reduce clogging and also removing the smoothing effect that is taught by Schoeps et al. as their "primary advantage."

In contrast to Schoeps et al., the presently claimed invention provides a device that encloses individual spray nozzles, creates an overpressure environment to reduce clogging of the sprays nozzles, and provides an opening that is constructed to not disturb the spray from the nozzle. As discussed above, Lin would not have suggested modifying Schoeps et al. to achieve the presently claimed invention. Lin is not concerned with providing an overpressure environment around the spray nozzles. Instead, Lin reduces clogging by the use of pressurized air flowing through the orifice 20. See Lin at column, lines 31-42, and Figure 2. Furthermore, Lin would not have suggested modifying Schoeps et al. to provide housings around individual nozzles or to remove the two-piece screen assembly. Such modifications would have the effect of destroying the teachings of Schoeps et al. wherein Schoeps et al. are focused on maintaining a uniform moisture distribution on the cylinder and an overpressure environment within the housing.

Marsden fails to cure these defects identified above with respect to Schoeps et al. and Lin. From the outstanding Office Action at page 5, it appears that Marsden is relied upon for teaching a spray valve for a spray nozzle, G, provided with an internal air conduit 45 and an air

bore 46 connected to the cover, wherein the air bore has such a diameter that a throttling effect is obtained. See Marsden at column 4, lines 45-62, and Figure 3. It is submitted that this in no way teaches modifying either Schoeps et al or Lin to achieve the presently claimed invention.

In view of the above comments, the claimed invention would not have been obvious from Schoeps et al, Lin, and Marsden. Accordingly, withdrawal of the rejection is requested.

New independent claim 9 is directed at a method claim for keeping a number of spray nozzles in a printing press spray beam clean. It is submitted that the steps according to new, independent claim 9 would not have been obvious from Schoeps et al., Lin, and Marsden.

It is believed that this application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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Date: March 9, 2009

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